Curriculum Vitae

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Education

1998-2003	Ph. D. in Medicinal Chemistry/Organic Chemistry, University of Michigan (Professor Masato Koreeda)
1996-1998	M. S. in Organic Chemistry, University of Alabama (Professor Michael P. Cava)
1993-1996	M. S. in Organic/Organometallic Chemistry, Nankai University, PRC (Professor Zhengzhi Zhang)
1989-1993	B. S. in Organic Chemistry, Nanchang University, PRC

Professional Experience

2013-	Professor, Department of Chemistry and Biochemistry, UC Santa Barbara
2011-2013	Associate Professor, Department of Chemistry and Biochemistry, UC Santa Barbara
2009-2011	Assistant Professor, Department of Chemistry and Biochemistry, UC Santa Barbara
2005-2009	Assistant Professor, Department of Chemistry, University of Nevada, Reno
2003-2005	Postdoctoral Fellow with Professor Sergey A. Kozmin, University of Chicago

Awards and Honors

2014	One of Highly Cited Researcher by Thomson Reuters (http://highlycited.com/index.htm)
2009	2009 Alfred P. Sloan Research Fellow
2009	Spring 2009 CAPA (Chinese American Chemistry & Chemical Biology Professor Association) Distinguished Junior Faculty Award.
2008	Mousel-Feltner Award for Excellence in Research and/or Creative Activity (UNR)
2008	NSF CAREER Award
2008	Amgen Young Investigator's Award
2007	Thieme Journal Award
2007	Unrestricted gift by Merck & Co, Inc.
2007	Ralph E. Powe Junior Faculty Enhancement Award
2002	Eli Lilly Fellowship, University of Michigan
2001	Pfizer Fellowship, University of Michigan
1996	Dean's Merit Scholarship, University of Alabama
1996	"Excellent Thesis" Award, Nankai University, PRC

Publications

- Independent Work

92 Xu, Z.; Chen, H.; Wang, Z.; Zhang, L. 'One-Pot Synthesis of Benzene-Fused Medium Ring Ketones: Gold Catalysis-Enabled Enolate Umpolung Reactivity' *Submitted.*

91 Wu, W.-T.; Xu, R.-Q.; Zhang, L.; You, S.-L. 'Construction of Spirocarbocycles Via Gold-Catalyzed Intramolecular Dearomatization of Naphthols' *Chem. Sci.* 2016. doi: 10.1039/c5sc04130a

90 Wu, W.-T.; Zhang, L.; You, S.-L. 'Catalytic Asymmetric Dearomatization (Cada) Reactions of Phenol and Aniline Derivatives' *Chem. Soc. Rev.* **2016**. doi: 10.1039/c5cs00356c.

89 Zheng, Z.; Wang, Z.; Wang, Y.; Zhang, L. 'Au-Catalysed Oxidative Cyclisation' *Chem. Soc. Rev*. **2016**. doi: 10.1039/c5cs00887e.

88 Zheng, Z.; Zhang, L. 'C-H Insertions in Oxidative Gold Catalysis: Synthesis of Polycyclic 2h-Pyran-3(6h)-Ones Via a Relay Strategy' *Org. Chem. Front.* **2015**, *2*, 1556-1560. (doi: 10.1039/c5qo00308c).

87 Chen, H.; Zhang, L. 'A Desulfonylative Approach in Oxidative Gold Catalysis: Regiospecific Access to Donor-Substituted Acyl Gold Carbenes' *Angew. Chem., Int. Ed.* **2015**, 10.1002/anie.201504511. (doi: 10.1002/anie.201504511) *[NSF CHE-1301343]*

86 Li, N.; Wang, T.-Y.; Gong, L.-Z.; Zhang, L. 'Gold-Catalyzed Multiple Cascade Reaction of 2-Alkynylphenylazides with Propargyl Alcohols' *Chem. - Eur. J.* **2015**, *21*, 3585-3588. (doi: 10.1002/chem.201406456)

85 Wang, Y.; Zheng, Z.; Zhang, L. 'Intramolecular Insertions into Unactivated C(Sp3)–H Bonds by Oxidatively Generated B-Diketone-A-Gold Carbenes: Synthesis of Cyclopentanones' *J. Am. Chem. Soc.* **2015**, *137*, 5316. (doi: 10.1021/jacs.5b02280) *[NIGMS R01 GM084254 & NSF CHE-1301343]*

84 Zheng, R.; Wang, Y.; Zhang, L. 'Ruthenium-Catalyzed Rearrangement of Propargyl Sulfoxides: Formation of α,β-Unsaturated Thioesters' *Tetrahedron Lett*. doi: http://dx.doi.org/10.1016/j.tetlet.2014.11.138. Invited contribution. *[NSF CHE-1301343]*

83 Wang, Y.; Zhang, L. 'Recent Developments in the Chemistry of Heteroaromatic N-Oxides' Synthesis **2015,** *47*, 289. (https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0034-1379884.pdf) *[ACS PRF (52040-ND1) and NSF CHE-1301343]*

82 Ji, K.; Zheng, Z.; Wang, Z. Zhang, L. 'Enantioselective Oxidative Gold Catalysis Enabled by a Rationally Designed P,N-Bidentate Ligand '*Angew. Chem., Int. Ed.* **2015**, *54*, 1245–1249. (doi: 10.1002/anie.201409300) [*NIGMS R01 GM084254*].

81 Ji, K.; D'Souza, B.; Nelson, J.; Zhang, L. 'Gold-catalyzed oxidation of propargylic ethers with internal C–C triple bonds: Impressive regioselectivity enabled by inductive effect' *J. Organometallic Chem.* **2014**, *770*, 142. [*NIGMS R01 GM084254*]

80 Zheng, Z.; Touve, M.; Barnes, J.; Reich, N.; Zhang, L. 'Synthesis-Enabled Probing of Mitosene Structural Space Leads to Improved Ic50 over Mitomycin C' *Angew. Chem., Int. Ed.* **2014**, *53*, 9302-9305 doi: 10.1002/anie.201402268. [*NIGMS R01 GM084254*]

79 Wang, Y.; Zheng, Z.; Zhang, L. 'Ruthenium-Catalyzed Oxidative Transformations of Terminal Alkynes to Ketenes by Using Tethered Sulfoxides: Access to B-Lactams and Cyclobutanones' *Angew. Chem., Int. Ed.* **2014**, *53*, 9572–9576 doi: 10.1002/anie.201403796. [*NSF (CHE-1301343) & ACS PRF (52040-ND1)]*

78 Wang, Z.; Wang, Y.; Zhang, L. 'Soft Propargylic Deprotonation: Designed Ligand Enables Au-Catalyzed Isomerization of Alkynes to 1,3-Dienes' *J. Am. Chem. Soc.* **2014**. 136, 8887–8890. doi: 10.1021/ja503909c. *[NIH (R01 GM084254) and NSF (CHE-1301343)]*

77 Ji, K.; Zhang, L. 'A Non-Diazo Strategy to Cyclopropanation Via Oxidatively Generated Gold Carbene: The Benefit of a Conformationally Rigid P,N-Bidentate Ligand ' *Org. Chem. Front.* **2014**, *1*, 34-38. (NIHMSID # 599293) (http://pubs.rsc.org/en/content/articlelanding/2014/qo/c3qo00080j#!divAbstract) [*NIGMS R01 GM084254*]

76 Li, J.; Ji, K.; Zheng, R.; Nelson, J.; Zhang, L. 'Expanding the Horizon of Intermolecular Trapping of in Situ Generated [Small Alpha]-Oxo Gold Carbenes: Efficient Oxidative Union of Allylic Sulfides and Terminal Alkynes Via C-C Bond Formation' *Chem. Commun*. **2014**, *50*, 4130-4133. (NIHMSID #599297) ((http://pubs.rsc.org/en/content/articlelanding/2014/cc/c4cc00739e#!divAbstract) [*NSF CHE-1301343 and NIGMS R01 GM084254*]

75 Wang, Y.; Wang, Z.; Li, Y.; Wu, G.; Cao, Z.; Zhang, L. 'A General Ligand Design for Gold Catalysis Allowing Ligand-Directed Anti-Nucleophilic Attack of Alkynes' *Nature Commun*. **2014**, doi: 10.1038/ncomms4470. (http://www.nature.com/ncomms/2014/140407/ncomms4470/full/ncomms4470.html) [*NSF CHE-1301343 and NIGMS R01 GM084254*]

74 Wu, G.; Zheng, R.; Nelson, J.; Zhang, L. 'One-Step Synthesis of Methanesulfonyloxymethyl Ketones Via Gold-Catalyzed Oxidation of Terminal Alkynes: A Combination of Ligand and Counter Anion Enables High Efficiency and a One-Pot Synthesis of 2,4-Disubstituted Thiazoles' *Adv. Synth. Catal.* **2014**, *356*, 1229-1234. (http://onlinelibrary.wiley.com/doi/10.1002/adsc.201300855/abstract) [*NSF CHE-1301343*]

73 Zheng, Z.; Tu, H.; Zhang, L. 'One-Pot Synthesis of Fused Pyrroles through a Key Gold-Catalysis-Triggered Cascade' *Chem. Eur. J.* **2014**, *20*, 2445-2448. (NIHMSID #599300) (http://onlinelibrary.wiley.com/doi/10.1002/chem.201304204/abstract) [*NIGMS R01 GM084254*]

72 Zhang, L. 'A Non-Diazo Approach to A-Oxo Gold Carbenes Via Gold-Catalyzed Alkyne Oxidation' *Acc. Chem. Res.* **2014**, *47*, 877–888. (NIHMSID #599302) (http://pubs.acs.org/doi/abs/10.1021/ar400181x) [*NSF CHE-0969157 and CHE-1301343 and NIGMS R01 GM084254*]

71 Ji, K.; Nelson, J.; Zhang, L. "Gold-Catalyzed Regioselective Oxidation of Propargylic Carboxylates: A Reliable Access to A-Carboxy-A,B-Unsaturated Ketones/Aldehydes" *Beilstein J. Org. Chem.* **2013**, *9*, 1925-1930 (http://www.beilstein-journals.org/bjoc/content/pdf/1860-5397-9-227.pdf) [*NSF (CHE-1301343)*].

70 Wang, Y.; Yepremyan, A.; Ghorai, S.; Todd, R.; Aue, D. H.; Zhang, L. "Gold-Catalyzed Cyclizations of cis-Enediynes: Insights into the Nature of Gold–Aryne Interactions" *Angew. Chem., Int. Ed.* **2013**, *52*, 7795-7799 (http://onlinelibrary.wiley.com/doi/10.1002/anie.201301057/abstract) [*NSF CAREER award (CHE-0969157 and CHE-1301343) and NIGMS (R01 GM084254)*]

69 Lu, B.; Li, Y.; Wang, Y.; Aue, D. H.; Luo, Y.; Zhang, L. '[3,3]-Sigmatropic Rearrangement vs. Carbene Formation in Gold-Catalyzed Transformations of Alkynyl Aryl Sulfoxides: Mechanistic Studies and Expanded Reaction Scope' *J. Am. Chem. Soc.* **2013**, *135*, 8512-8524. (http://pubs.acs.org/doi/full/10.1021/ja401343p) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

68 Ji, K.; Zhao, Y.; Zhang, L. 'Optimizing P,N-Bidentate Ligands for Oxidative Gold Catalysis: Highly Efficient Intermolecular Trapping of α-Oxo Gold Carbenes by Carboxylic Acids' *Angew. Chem., Int. Ed.* **2013**, *52*, 6508-6512. (http://onlinelibrary.wiley.com/doi/10.1002/anie.201301601/abstract) [*NIGMS (R01 GM084254)*]

67 Wang, Y.; Liu, L.; Zhang, L. 'Combining Zn Ion Catalysis with Homogeneous Gold Catalysis: An Efficient Annulation Approach to N-Protected Indoles' *Chem. Sci.* **2013**, *4*, 739-746 (http://pubs.rsc.org/en/content/articlelanding/2013/sc/c2sc21333h) [*NIGMS (R01 GM084254)*]

66 Xiao, Y.; Zhang, L. "Synthesis of Bicyclic Imidazoles via [2 + 3] Cycloaddition between Nitriles and Regioselectively Generated -Imino Gold Carbene Intermediates" *Org. Lett.* **2012**, *14*, 4662-4665. (http://pubs.acs.org/doi/abs/10.1021/ol302102h) [*NSF CAREER award (CHE-0969157)*]

65 Yan, Z.-Y.; Xiao, Y.; Zhang, L. "A Gold-Catalyzed One-Step Construction of 5-Electron-Withdrawing Group-Substituted 2,3-Dihydro-1H-Pyrrolizines from Linear Enynyl Azides: Azide as the Nitrene Precursor and A Formal Synthesis of 7-methoxymitosene" *Angew. Chem., Int. Ed.* **2012**, *51*, 8624-8627 (http://onlinelibrary.wiley.com/doi/10.1002/anie.201203678/abstract) [*NSF CAREER award (CHE-0969157)*]

64 Luo, Y.; Ji, K.; Li, Y.; Zhang, L. 'Tempering the Reactivities of Postulated A-Oxo Gold Carbenes Using Bidentate Ligands: Implication of Tricoordinated Gold Intermediates and the Development of an Expedient Bimolecular Assembly of 2,4-Disubstituted Oxazoles' *J. Am. Chem. Soc*. **2012**, *134*, 17412-17415. (http://pubs.acs.org/doi/abs/10.1021/ja307948m) [*NIGMS (R01 GM084254) and NSF CAREER award (CHE-0969157)*]

63 He, W.; Xie, L.; Xu, Y.; Xiang, J.; Zhang, L. "Electrophilicity of [Small Alpha]-Oxo Gold Carbene Intermediates: Halogen Abstractions from Halogenated Solvents Leading to the Formation of Chloro/Bromomethyl Ketones" *Org. Biomol. Chem.* **2012**, *10*, 3168-3171. (http://dx.doi.org/10.1039/C2OB25235J) [*NSF CAREER award (CHE-0969157)*]

62 Liu, L.; Wang, Y.; Zhang, L. "Formal Synthesis of 7-Methoxymitosene and Synthesis of Its Analog Via a Key $PtCl_2$-Catalyzed Cycloisomerization" *Org. Lett.* **2012**, *14*, 3736-3739. (http://pubs.acs.org/doi/full/10.1021/ol301593w) [*NIGMS (R01 GM084254)*]

61 Liu, L.; Zhang, L. "Access to Electron-Rich Arene-Fused Hexahydroquinolizinones through a Gold-Catalysis-Initiated Cascade Process" *Angew. Chem., Int. Ed.* **2012**, *51*, 7301-7304 (http://onlinelibrary.wiley.com/doi/10.1002/anie.201203303/pdf) [*NIGMS (R01 GM084254)*]

60 Wang, Y.; Ji, K.; Lan, S.; Zhang, L. 'Rapid Access to Chroman-3-Ones through Gold-Catalyzed Oxidation of Propargyl Aryl Ethers' *Angew. Chem., Int. Ed*. 2012, *51*, 1915-1918. (http://dx.doi.org/10.1002/anie.201107561) [*NIGMS (R01 GM084254)*]

59 Noey, E. L.; Luo, Y.; Zhang, L.; Houk, K. N. "Mechanism of Gold(I)-Catalyzed Rearrangements of Acetylenic Amine-N-Oxides: Computational Investigations Lead to a New Mechanism Confirmed by Experiment" *J. Am. Chem. Soc.* 2012, *134*, 1078–1084. (http://pubs.acs.org/doi/abs/10.1021/ja208860x) [*NIGMS (R01 GM084254)*]

58 Ye, L.; Wang, Y.; Aue, D. H.; Zhang, L. "Experimental and Computational Evidence for Gold Vinylidenes: Generation from Terminal Alkynes via a Bifurcation Pathway and Facile C–H Insertions" *J. Am. Chem. Soc.* 2012, *134*, 31–34. (http://pubs.acs.org/doi/full/10.1021/ja2091992) [*NIGMS (R01 GM084254)*]

57 Sun, S.; Knoll, J.; Luo, Y.; Zhang, L. "Gold-Catalyzed Regioselective Dimerization of Aliphatic Terminal Alkynes" Synlett 2012, *23*, 54-56. (https://www.thieme-connect.com/ejournals/abstract/10.1055/s-0031-1289567) [*NIGMS (R01 GM084254)*]

56 Lu, B.; Luo, Y.; Liu, L.; Ye, L.; Wang, Y.; Zhang, L. "Umpolung Reactivity of Indole through Gold Catalysis" *Angew. Chem., Int. Ed.* 2011, *50*, 8358-8362. (http://dx.doi.org/10.1002/anie.201103014) [*NIGMS (R01 GM084254)*]

55 Wang, Y.; Ye, L.; Zhang, L. "Au-catalyzed synthesis of 2-alkylindoles from N-arylhydroxylamines and terminal alkynes" *Chem. Commun.* 2011, *47*, 7815-7817. (http://dx.doi.org/10.1039/C1CC12212F) [*NIGMS (R01 GM084254)*]

54 He, W.; Li, C.; Zhang, L. "An Efficient [2 + 2 + 1] Synthesis of 2,5-Disubstituted Oxazoles via Gold-Catalyzed Intermolecular Alkyne Oxidation" *J. Am. Chem. Soc.* 2011, *133*, 8482-8485. (http:/dx.doi.org/10.1021/ja2029188) *Highlighted by Synfacts* [*NSF CAREER award (CHE-0969157)*]

53 Luo, Y; Zhang, G.; Hwang, E. S.; Wilcoxon, T. A.; Zhang, L. "Gold-catalyzed regioselective oxidation of terminal allenes: formation of α-methanesulfonyloxy methyl ketones" *Beilstein J. Org. Chem.* 2011, *7,* 596-600 (invited). (http://dx.doi.org/10.3762/bjoc.7.69) [*NSF CAREER award (CHE-0969157)*]

52 Zhang, G.; Luo, Y.; Wang, Y.; Zhang, L. "Combining Gold(I)/Gold(III) Catalysis and C—H Functionalization: A Formal Intramolecular [3+2] Annulation towards Tricyclic Indolines and Mechanistic Studies" *Angew. Chem. Int. Ed.* 2011, *50*, 4450-4454. (http://dx.doi.org/10.1002/anie.201100293) *Highlighted by Synfacts* [*NSF CAREER award (CHE-0969157)*]

51 Ye, L.; He, W.; Zhang, L. "Flexible and Stereoselective Synthesis of Azetidine-3-one via A Key Gold-Catalyzed Intermolecular Alkyne Oxidation" *Angew. Chem., Int. Ed.* 2011, *50*, 3236-3239. (http://dx.doi.org/10.1002/anie.201007624) [*NIGMS (R01 GM084254)*]

50 Li, C.; Zhang, L. "Gold-Catalyzed Nitrene Transfer to Activated Alkynes: Formation of α, β-Unsaturated Amidines" *Org. Lett.* 2011, *13*, 1738-1741. (http://dx.doi.org/10.1021/ol2002607) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

49 Wang, Y.; Lu, B.; Zhang, L. " The use of Br/Cl to promote regioselective gold-catalyzed rearrangement of propargylic carboxylates: an efficient synthesis of (1Z, 3E)-1-bromo/chloro-2-carboxy-1,3-dienes" *Chem. Commun. 2010, 46,* 9179-9181. (http://dx.doi.org/10.1039/C0CC03669B) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

48 Cui, L.; Li, C.; Zhang, L. "A Modular, Efficient, and Stereoselective Synthesis of Substituted Piperidin-4-ols" *Angew. Chem. Int. Ed.* 2010, *49*, 9178-9181. (http://dx.doi.org/10.1002/anie.201004712) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

47 Lu, B.; Li, C.; Zhang, L. "Gold-Catalyzed Highly Regioselective Oxidation of C-C Triple Bonds under Non-Acidic Conditions: Propargyl Moieties as Masked α,β-Unsaturated Carbonyls" *J. Am. Chem. Soc.* 2010, *132*, 14070-14072. (http://dx.doi.org/10.1021/ja1072614) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

46 Ye, L.; He, W.; Zhang, L. "Gold-Catalyzed One-Step Practical Synthesis of Oxetan-3-ones from Readily Available Propargylic Alcohols" *J. Am. Chem. Soc.* 2010, *132*, 8550-8551. (http://dx.doi.org/10.1021/ja1033952) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

45 Cui, L.; Ye, L.; Zhang, L. "Gold-catalyzed efficient synthesis of azepan-4-ones via a two-step [5+2] annulation" *Chem. Commun.* 2010, *46*, 3351-3353. (http://dx.doi.org/10.1039/C001314E) [*NIGMS (R01 GM084254)*]

44 Wang, S.; Zhang, G.; Zhang, L. "Gold-Catalyzed Reaction of Propargylic Carboxylates via an Initial 3,3-Rearrangement" *Synlett* 2010, 692-706. (http://dx.doi.org/10.1055/s-0029-1219527) [*NSF CAREER award (CHE-0969157)*]

43 Ye, L.; Cui, L.; Zhang, G.; Zhang, L. "Alkynes as Equivalents of α-Diazo Ketones in Generating α-Oxo Metal Carbenes: A Gold-Catalyzed Expedient Synthesis of Dihydrofuran-3-ones" *J. Am. Chem. Soc.* 2010, *132*, 3258-3259. (http://dx.doi.org/10.1021/ja100041e) [*NSF CAREER award (CHE-0969157) and NIGMS (R01 GM084254)*]

42 Cui, L.; Zhang, L. "Total synthesis of (+)-lentiginosine via a key Au catalysis" *Sci. China. B: Chem.* 2010, *53*, 113-118. (http://dx.doi.org/10.1007/s11426-010-0010-6) [*NSF CAREER award (CHE-0969157)*]

41 Zhang, G.; Cui, L.; Wang, Y.; Zhang, L. "Homogeneous Gold-Catalyzed Oxidative Carboheterofunctionalization of Alkenes" *J. Am. Chem. Soc.* 2010, *132*, 1474-1475. (http://dx.doi.org/10.1021/ja909555d) *Highlighted by Synfacts* [*NSF CAREER award (CHE-0969157)*]

40 Cao, S.; Zhang, L. "One-Pot Synthesis of Arene-Fused 2-Acylcyclohexenones from Propargylic Carboxylates" *Sci. China. Ser. B. Chem.* 2009, *52*, 1337-1344. (http://dx.doi.org/ 10.1007/s11426-009-0194-9) [*NSF CAREER award (CHE-0748484)*]

39 Ye, L.; Zhang. L. "Practical Synthesis of Linear □-Iodo/Bromo-□□□-unsaturated aldehydes/ketones from Propargylic Alcohols via Au/Mo Bimetallic Catalysis" *Org. Lett.* 2009, *11*, 3646-3649. (http://dx.doi.org/10.1021/ol901346k) *Highlighted by Synfacts* [*NSF CAREER award (CHE-0748484)*]

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37 Cui, L.; Zhang, G.; Zhang, L. "Homogeneous gold-catalyzed efficient oxidative dimerization of propargylic acetates" *Bioorg. Med. Chem. Lett.* 2009, *19*, 3884-3887. (http://www.sciencedirect.com/science/article/pii/S0960894X09004351) [*NSF CAREER award (CHE-0748484) and Amgen*]

36 Peng, Y.; Cui, L.; Zhang, G.; Zhang, L. "Gold-Catalyzed Homogeneous Oxidative C-O Bond Formation: Efficient Synthesis of 1-Benzoxyvinyl Ketones" *J. Am. Chem. Soc.* 2009, *131*, 5062-5063. (http://dx.doi.org/10.1021/ja901048w) [*NSF CAREER award (CHE-0748484) and Amgen*]

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32 Huang, X.; Zhang, L. "Unusual Au(III)-Catalyzed Dimerization of Benzoxazol-2-yloxy Enynes: Formation of Substituted 1,5-Cyclooctadienes" *J. Organometallic Chem.* 2009, *694*, 520-523 (*invited for the special issue on 'New Perspectives for Homogeneous Catalysis'*). (http://dx.doi.org/ 10.1016/j.jorganchem.2008.09.011)

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27 Li, G.; Zhang, G.; Zhang, L. "Au-Catalyzed Synthesis of (1*Z,* 3*E*)-2-Pivaloxy-1,3-Dienes from Propargylic Pivalates" *J. Am. Chem. Soc.* 2008, *130*, 3740-3741. (http://dx.doi.org/10.1021/ja800001h)

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